



DATA SHEET

UE10-2FG3D0

UE10-2FG
Safety relays

SICK

Sensor Intelligence

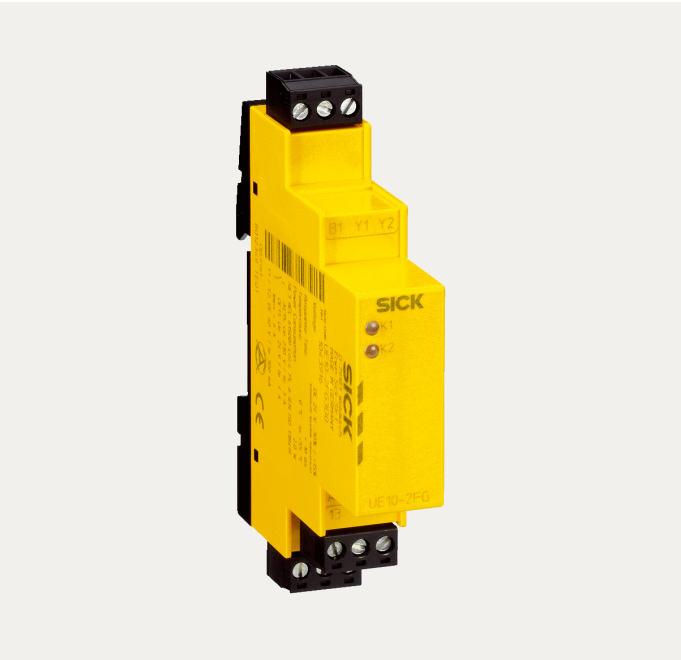


Illustration may differ

SAFETY RELAYS

UE10-2FG3D0

ORDERING INFORMATION

Type	part no.
UE10-2FG3D0	1043916

Further device versions and accessories at www.sick.com/UE10-2FG



DETAILED TECHNICAL DATA

SAFETY-RELATED PARAMETERS

Safety integrity level	SIL 3 (IEC 61508) ¹⁾
Category	Category 4 (EN ISO 13849) ¹⁾
Performance level	PL e (EN ISO 13849) ¹⁾
B _{10d} parameter	1 x 10 ⁵ switching cycles (AC-15, 230 V, I = 2 A) 2.5 x 10 ⁵ switching cycles (AC-15, 230 V, I = 1 A) 5.4 x 10 ⁵ switching cycles (DC-13, 24 V, I = 0.5 A) 1 x 10 ⁷ switching cycles (DC-13, 24 V, I ≤ 2 A)
PFH ₀ (mean probability of a dangerous failure per hour)	7.0 x 10 ⁻¹⁰ (EN ISO 13849)
T _M (mission time)	20 years (EN ISO 13849)

¹⁾ If the feedback current path Y1 - Y2 (external device monitoring) is monitored using an appropriate main unit.

ELECTRONICS - OPERATING DATA

Voltage supply	B1/A2, B2/A2
Output circuit > 25 V AC / 60 V DC	PELV
Output circuit ≤ 25 V AC / 60 V DC	PELV or SELV
Residual ripple	(≤ 2.4 V _{pp}) ¹⁾
Power consumption	(≤ 2 W (DC))
Overvoltage category	II
Rated insulation voltage U _i	300 V AC
Rated impulse withstand voltage U _{imp}	4 kV
Test voltage	1.2 kV (50 Hz) (EN 60439-1)

¹⁾ In DC operation, within the limits of V_g.

ELECTRONICS - INPUT CIRCUITS: B1, B2

Input voltage	24 V DC (16.8 V DC ... 27.6 V DC)
Input current	≤ 50 mA
Reset time	≤ 30 ms
Test pulse width	≤ 1 ms

ELECTRONICS - OUTPUT CURRENT PATHS: 13/14, 23/24, Y1/Y2

Response time	(≤ 10 ms)
Number of enabling current paths (N/O)	2, relevant for safety
Number of feedback current paths (normally closed)	1, external device monitoring (EDM)
Contact type	Positively driven
Contact material	Silver alloy, gold flashed
Switching voltage	
Enabling current path	10 V AC/DC ... 250 V AC/DC
Feedback current path	0.1 V AC/DC ... 60 V AC/DC
Current loading	
Enabling current path	10 mA ... 6 A
Feedback current path	1 mA ... 300 mA
Switching capacity	≤ 1,500 VA (AC) ≤ 200 W (DC)
Usage category	AC-15/DC-13 (EN 60947-5-1)
Rated operating current (voltage)	3 A (230 V AC) 4 A (24 V DC)
Mechanical life (relay contacts)	1 x 10 ⁷ switching cycles
Electrical life (relay contacts)	1 x 10 ⁵ switching cycles

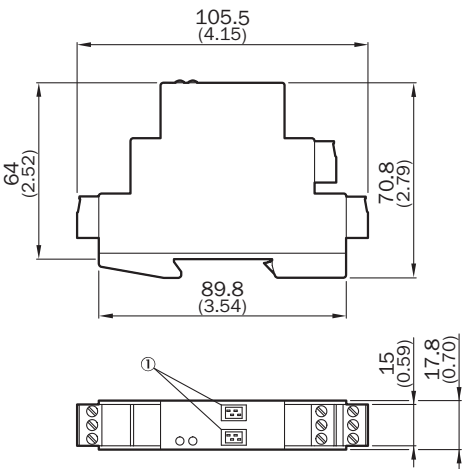
MECHANICS

Dimensions (W x H x D)	17.8 mm x 105.5 mm x 70.8 mm
Contamination rating	3 (EN 50178)
Weight	+ 91 g

CERTIFICATES

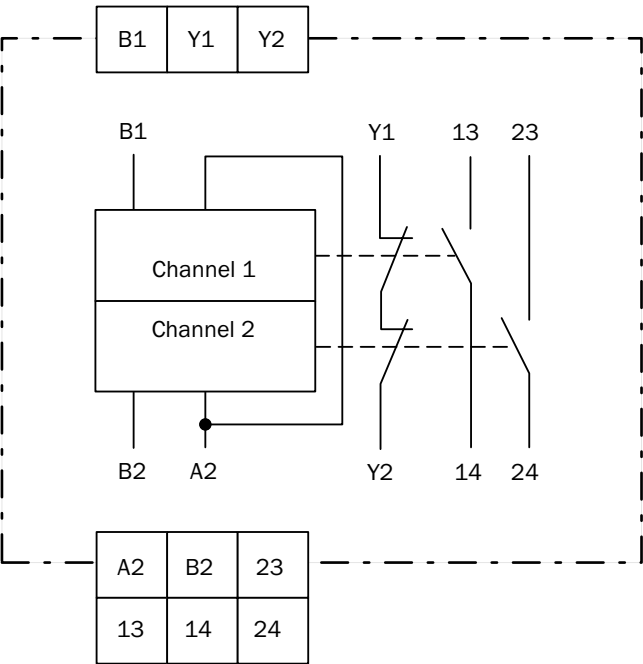
EU declaration of conformity	✓
Type-Examination certificate	✓

DIMENSIONAL DRAWING UE10-2FG3, UE12-2FG3



Dimensions in mm (inch)
① Only valid for UE12-2FG3

CONNECTION DIAGRAM



Further information as well as suitable accessories, example applications and downloads such as CAD di-
mensional models, operating instructions and software can be found at www.sick.com/1043916



SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK
Sensor Intelligence